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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,260	03/02/2004	Patrick Larroche	48323-0004-00-US (227613)	3987
23973 7590 12/11/2007 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			EXAMINER GOMA, TAWFIK A	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 12/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/792,260

Applicant(s)

LARROCHE, PATRICK

Examiner

Tawfik Goma

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

This action is in response to the amendment filed on 9/20/2007.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-15, 18-19, and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Rolhaus et al (US 6434109).

Regarding claim 1, Rolhaus discloses a data storage medium (fig. 13), comprising: a substrate supporting a data storage region for storing readable data (figs. 14-17), and being subjected in normal use to be to motion when read (col. 11 lines 1-3); a reservoir attached to the substrate and located in proximity to the data storage region for storing a flowable chemical agent and so arranged that the said chemical agent can flow from the reservoir to interact with the data storage medium and permanently interfere with the readability of the data (72, fig. 13 and col. 11 lines 1-14); wherein the chemical agent is retained in the reservoir substantially solely by liquid surface phenomena (col. 11 lines 1-8), and wherein in normal use force associated with the motion tends to overcome the action of the liquid surface phenomena and cause the chemical agent to flow from the reservoir (col. 11 lines 1-13).

Regarding claim 2, Rolhaus further discloses wherein the data storage region comprises a data storage layer (col. 1 lines 11-14).

Regarding claim 3, Rolhaus further discloses wherein the chemical agent

interacts with the data storage medium by damaging part of the data storage region (col. 3 lines 29-39).

Regarding claim 4, Rolhaus further discloses wherein the data storage medium comprises a reflective layer in which data is readable by variations in reflection, and the chemical agent interacts with the data storage medium by changing the reflection of the reflective layer (col. 12 lines 34-38).

Regarding claim 5, Rolhaus further discloses wherein the substrate is arranged in use to be rotated, and the force associated with the rapid motion comprises centrifugal force (col. 11 lines 52-56).

Regarding claim 6, Rolhaus further discloses wherein the reservoir is elongate and has an outlet for the chemical agent at one end, and wherein the reservoir is only partially filled at the end further from the outlet (col. 11 lines 1-14 and fig. 17).

Regarding claim 7, Rolhaus further discloses wherein the substrate is rotated about an axis in use, the force associated with the motion comprises centrifugal force (col. 11 lines 52-56), and the elongate reservoir is a circular arc centered on the axis of rotation (fig. 13).

Regarding claim 10, Rolhaus discloses a data storage medium rotated about an axis in use and comprising: a data storage region (70, fig. 13); an elongate reservoir forming a circular curve centered on the axis (74, fig. 13); and a chemical agent capable of interacting with the data storage region and permanently reducing the readability of the data (col. 12 lines 34-38); wherein the chemical agent is stored in the elongate reservoir (col. 11 lines 1-5), is retained in the reservoir substantially by surface tension (col. 11 lines 1-11) and is arranged to be released from the reservoir by centrifugal force to interact with the data storage region

when the medium is rotated in use (col. 11 lines 1-15 and lines 52-56).

Regarding claim 11, Rolhaus further discloses wherein the reservoir has a outlet for the chemical agent at one circumferential end (72, fig. 13), and wherein the reservoir is only partially filled at the end further from the outlet (col. 11 lines 5-8).

Regarding claim 12, Rolhaus further discloses wherein the data storage region comprises a data storage layer (col. 1 lines 11-14).

Regarding claim 13, Rolhaus further discloses wherein the chemical agent interacts with the data storage medium by damaging part of the data storage region (col. 3 lines 29-39).

Regarding claim 14, Rolhaus further discloses the medium having a reflective layer in which data is readable by variations in reflection, and the chemical agent interacts with the data storage medium by changing the reflection of the reflective layer (col. 12 lines 34-38 and fig. 17).

Regarding claim 15, Rolhaus further discloses wherein the chemical agent is arranged to reduce the readability of a part of the data necessary for locating or interpreting other data on the disc (col. 12 lines 41-44).

Regarding claim 18, Rolhaus further discloses wherein the data storage region is an annular region (70, fig. 13), and wherein the reservoir is radially inward of the annular region (74, fig. 13), and wherein the liquid is arranged to flow outwardly under the action of centrifugal force to the data storage region (col. 11 lines 50-56).

Regarding claim 19, Rolhaus discloses wherein the liquid flows from the reservoir to an annular second reservoir to which a radially inner part of the data storage region is exposed (90', fig. 15).

Regarding claim 23, Rolhaus disclose an optical disc (fig. 13), comprising: a reflective layer from which data may be read (82, fig. 14); and a reservoir for a liquid reagent that can alter the properties of the reflective layer to interfere with reading of the data (74, fig. 13 and col. 12 lines 34-38); wherein the reservoir is radially inward of the data on the reflective layer (74, fig. 13); wherein the liquid is retained in the reservoir substantially by liquid surface phenomena (col. 11 lines 1-15); and wherein centrifugal force in normal reading of the disc is sufficient to overcome the surface phenomena and cause radially outward flow of the liquid to interact with the reflective layer (col. 11 lines 1-15 and lines 52-56).

Regarding claim 24, Rolhaus further discloses wherein the reservoir is elongate and extends around the center of the disc (74, fig. 13).

Regarding claim 25, Rolhaus further discloses wherein the reservoir has an outlet at one end, and is partially filled with liquid reagent at the other end (72, fig. 13, fig. 17 and col. 11 lines 1-15).

Regarding claim 26, Rolhaus further discloses wherein the liquid reagent flows from the reservoir to contact a lead-in section at the inner edge of the reflective layer (col. 12 lines 41-44).

Claims 16 and 17 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Rolhaus et al (US 6434109) in view of Kasami et al (US 5768221).

Regarding claims 16 and 17, Rolhaus fails to disclose wherein the medium is arranged in use to be rotated at a speed of greater than 500 rpm and at about 1000 rpm. In the same field of endeavor, Kasami discloses a medium to be used at a speed of 1000 rpm (col. 5 lines 33-34). It would have been obvious to one of ordinary skill in the art to rotate the disc at 1000 rpm. The

rationale is as follows: One of ordinary skill in the art at the time of applicant's invention would have been motivated to rotate the disc at 1000 rpm in order to reproduce the data at the proper speed.

Claims 8, 9, 21 and 27 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Rolhaus et al (US 6434109)

Regarding claims 8 and 9, Rolhaus fails to disclose wherein the liquid is arranged to be caused to flow from the reservoir by an effective acceleration greater than 100 m/s^2 or about 200 m/s^2 . It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the liquid dispense at an acceleration greater than 100 m/s^2 or about 200 m/s^2 . The motivation would have been: to have the liquid dispense during the normal operation and rotation of the disc by adjusting the properties of the liquid in the course of routine engineering optimization/experimentation. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in claims 8 and 9 are considered to be within the level of ordinary skill in the art.

Regarding claims 21 and 27, Rolhaus fails to disclose wherein the reservoir is from about 0.03 mm to about 0.4 mm across in the narrowest direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the reservoir be .03 mm to .4 mm in the narrowest direction. The motivation would have been: to reduce the size of the reservoir and maintain the size of the recording region in the course of routine engineering optimization/experimentation. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in claims 21 and 27 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Claim 22 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Rolhaus et al (US 6434109) in view of Larroche (US 6468619)

Regarding claim 22, Rolhaus fails to disclose wherein the liquid comprises a reagent selected from the group consisting of citric acid and sodium chloride in aqueous solution. Rolhaus discloses the use of LiCl salt and sulfuric acid to destroy the aluminum layer (Table 1a). In the same field of endeavor, Laroche discloses that sodium chloride can be used (col. 8 lines 1-3 lines 8-15). It would have been obvious to one of ordinary skill in the art to modify the read-inhibit material by providing a sodium chloride solution. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to use sodium chloride in order to select a material having a preset conductivity and further to have an agent that is not hazardous to the user.

Response to Arguments

Applicant's arguments with respect to claims 1-19 and 21-27 have been fully considered but are not persuasive.

With respect to applicant's argument that Rollhaus does not disclose the use of liquid surface phenomena (or surface tension) to retain the liquid, this argument is not persuasive because surface tension of a liquid is an inherent property of all liquids that defines their behavior. Rollhaus clearly discloses that the liquid can be retained in the reservoir by forming annular ridges (col. 11 lines 11-14) which inherently discloses the use of surface tension to retain the liquid since the liquid would not escape from these ridges. Rollhaus discloses that the liquid escapes the reservoir and overcomes this surface tension when it is rotated during reproduction. Applicant's argument that the examiner is using impermissible hindsight is not persuasive because the properties of liquids is inherent to their physical behavior and was not learned through applicant's disclosure.

Applicant's argument that the Rollhaus reference is not enabling is not persuasive. MPEP section 716.07 states "Since every patent is presumed valid (35 U.S.C. 282), and since that presumption includes the presumption of operability (Metropolitan Eng. Co. v. Coe, 78 F.2d 199, 25 USPQ 216 (D.C.Cir. 1935), examiners should not express any opinion on the operability of a patent. Affidavits or declarations attacking the operability of a patent cited as a reference must rebut the presumption of operability by a preponderance of the evidence. In re Sasse, 629 F.2d 675, 207 USPQ 107 (CCPA 1980)," and "It is to be presumed also that skilled workers would as a matter of course, if they do not immediately obtain desired results, make certain experiments and adaptations, within the skill of the competent worker." The Rollhaus reference

is deemed to be operable and enabling since applicant has not submitted any evidence or affidavit to show that it is not. With respect to applicant's assertion that the proprietors of the Rollhaus related European application have admitted that it was "impossible" to construct a laminated disc with a mobile liquid, this argument fails for multiple reasons. First, the reference discussed is not the reference in the instant application and the fact that it is commonly owned does not in any way limit the invention of the Rollhaus reference. Second, the applicant is attempting to point to a correspondence in a European patent application which is given no weight since the US Patent Office makes its own independent decisions. Finally, applicant has mischaracterized the arguments presented in that correspondence as an "admission," when in fact it is only an attack on the impossible combination of references used to reject the European application. The arguments made are not that it is impossible to place a reservoir within a disc, but rather it would be impossible to modify and combine the references used by the EPO to have a reservoir formed.

With respect to applicant's argument that the device of figure 17 does not reference that of figure 13, this argument is not persuasive because Rollhaus clearly states that the two embodiments are related (col. 11 lines 17-20).

Applicant's arguments regarding claims 3 and 13 are not persuasive because Rollhaus discloses the use of the read inhibit agent of figures 13 and 17 to damage part of the disc as claimed (col. 11 lines 6-11).

Applicant's arguments with respect to claims 6 and 11 are not persuasive because Rollhaus discloses wherein there is an outlet at one end (104, fig 17) and that the reservoir can be partially filled at the end opposite the outlet (102, fig. 17 and col. 11 lines 17-23). If the

reservoir area 102 was fully filled there would be no need for the capillary tubes used to transmit the solvent. Applicant's argument that figure 17 is mutually exclusive from figure 13 is not persuasive because Rollhaus discloses that they are not mutually exclusive (col. 11 lines 16-19). Applicant's arguments with respect to claim 19 are not persuasive because the areas 90' are formed to promote the aluminum corrosion, which is the same form of corrosion used by the read-inhibit agents in figures 17 and 13. The liquid of figure 17 for example must flow to the AL region as depicted in the figure in order to function.

With respect to the dimensional limitations of claims 8, 9, 21 and 27, applicant has not shown any evidence of unexpected results for these limitations. A mere assertion that there is an improvement in this range is not sufficient.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tawfik Goma/
11/28/2007

/William Korzuch/
SPE, Art Unit 2627